

Candle flame experiment

How far do you have to stand from a candle flame so that its brightness is comparable to the brightest stars in the sky?

You will need a candle and something to light it. This experiment is best done at a location that is *not* severely compromised by light pollution.

You will need a yardstick or retractable ruler. Why? Measure off 10 or 20 of your normal paces and use a measuring device to determine exactly how many feet that is. The number of feet divided by the number of paces is the length of your walking stride.

Note that the planets Venus, Mars, Jupiter, or Saturn may be visible in the evening after dark. They are not the brightest *stars* in the sky, are they?

Once you are pretty confident that you are a certain distance from a candle flame so that it is comparable in brightness to the brightest star(s) in the sky, walk off the distance to the candle and keep track of the number of normal strides it is. Then multiply by the length of your stride to get a total number of feet. What did you get?

Your write up should include any and all relevant details of what you did. Just giving the number of feet is insufficient to garner extra credit.